

**PJA50F series Reliability test results**

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No.	Test Item	Testing conditions	Conditions of acceptability	Number of samples	Number of failures
1	Heat cycle test	(1) -40°C ~ 125°C 30minutes each (2) 800cycles	(1)No degradation of electric characteristics after test. (2)No crack at solder joint.	1	0
2	High temperature/ High humidity bias test	(1) Ta=85°C, RH=85% (2) At rated input (3) Load 0% (4) 1000hours	(1)No degradation of electric characteristics after test.	1	0
3	Vibration test	(1) f=10~55Hz, 29.4m/s ² (3G) (2) 3 minutes period (3) 60 minutes along X, Y and Z axis	(1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No mechanical damage of appearance.	1	0
4	Impact test	(1) 294.0m/s ² (30G), 11ms (2) Once each X, Y and Z axis	(1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No mechanical damage of appearance.	3	0
5	Electrostatic discharge immunity test	(1) Rated input (2) Rated load (3) Contact discharge : Level 4 (8kV) (4) Air discharge : Level 4 (15kV)	(1)No protection circuit fail. (2)No output voltage drop with control circuit fail. (3)No function fail.	1	0